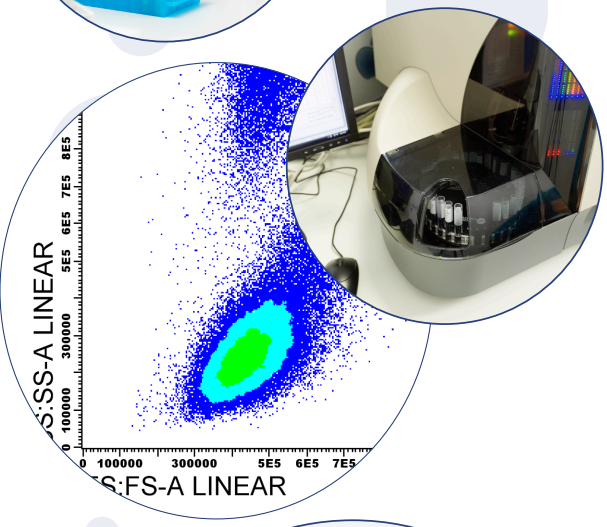
CALTAG

Accuracy for Flow Cytometry

Preserve cellular antigens and prevent cellular degradation for up to 14 days with TransFix®/EDTA Vacuum Blood Collection Tubes

IVD



Without stabilisation, flow cytometric analysis of blood samples must be performed within 48 hours of venepuncture. Aged blood samples exhibit indistinguishable cell subsets and inaccurate absolute cell counts, which can lead to erroneous clinical results(1).

TransFix®/EDTA Vacuum Blood Collection Tubes (TVTs) are available as in vitro diagnostic devices in Europe, intended for immunophenotyping and immune monitoring of HIV patients. Direct draw collection tubes are pre-filled with TransFix®/EDTA to immediately stabilise venous blood at the point of collection, preserving the immunophenotype of leucocytes until routine flow cytometric analysis can be performed.

Benefits of Sample Stabilisation

TransFix® allows recovery of lymphocyte subset markers for up to 14 days at 2-8°C, maintaining the immunophenotypic profile of fresh blood. This provides the following advantages:

Consistent:

- Maintain sample integrity during transportation between clinical sites.
- Improve pre-analysis variation by preserving all samples at the same time point.

Cost Efficient:

- Achieve greater efficiency in testing by batching samples.
- Prevent the need for repeat phlebotomy or lumbar puncture due to degraded samples.
- Perform additional tests on the same sample after the initial analysis, without patient recall.

Convenient:

- Easy to use - just mix by inversion.
- Eliminates the need for weekend and evening work.
- Mitigate the impact of unexpected machine breakdown or staff shortages.
- Transport samples at ambient temperature.

Product Features

- Prefilled with sufficient TransFix® and K_3EDTA to stabilise and anticoagulate a final draw volume of 3 mL or 9 mL.
- Immediate stabilisation providing optimal sample stability.
- Ease of application: TransFix®/EDTA Vacuum Blood Collection Tubes fit docking sheaths from most manufacturers.
- Sterilised by gamma radiation.
- Compatible with antibody conjugates from multiple suppliers. For more information, visit:
  www.caltag.co.uk/2019/10/23/transfix-compatible-antibodies/

ORDER NOW! Visit: www.caltag.co.uk/distributors to find your local distributor

TransFix®/EDTA Vacuum Blood Collection Tubes (TVTs) show equivalent leukocytic profiles at Day 15 compared to fresh blood

TVT stabilised samples show equivalent leukocytic profiles at Day 15 compared to the fresh blood control, with low levels of cellular debris, good separation of CD3, CD4, CD8, CD16+56, and CD45 and CD19 populations, and similar mean fluorescence intensities to fresh blood allowing for clear segregation of leukocyte sub-populations. Figures 1-3 show the flow cytometry dot plots for a HIV patient using these markers.

Figure 1: Gold Standard (fresh blood in BD K3EDTA Vacutainer) (Day 0)

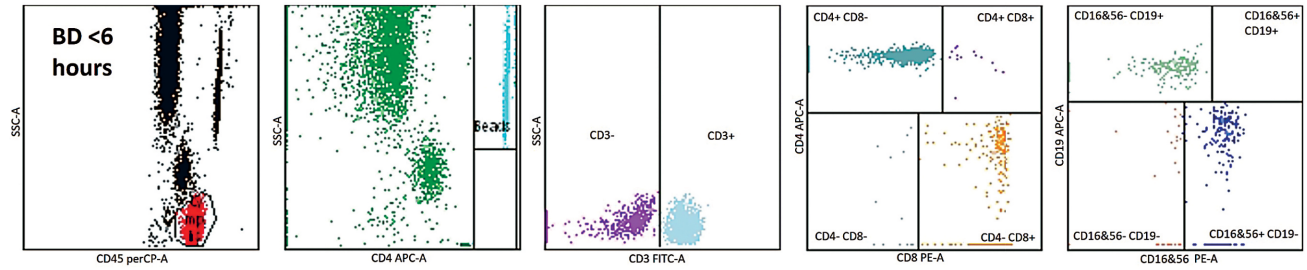


Figure 2: TVT Stabilised Blood (Day 15)

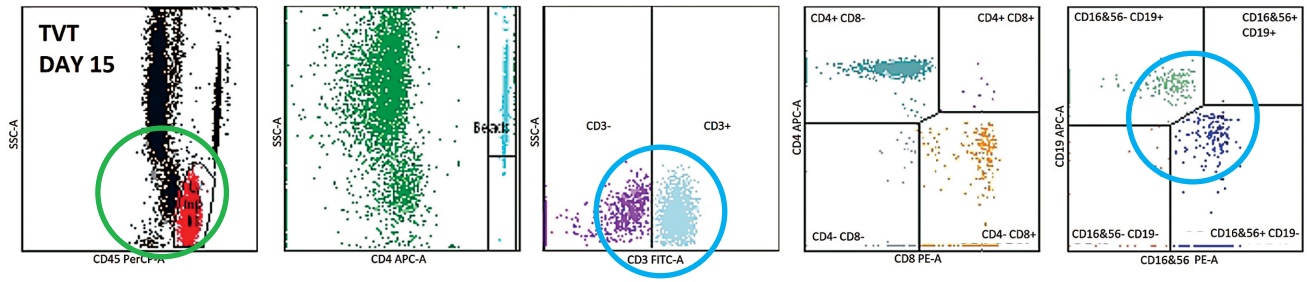
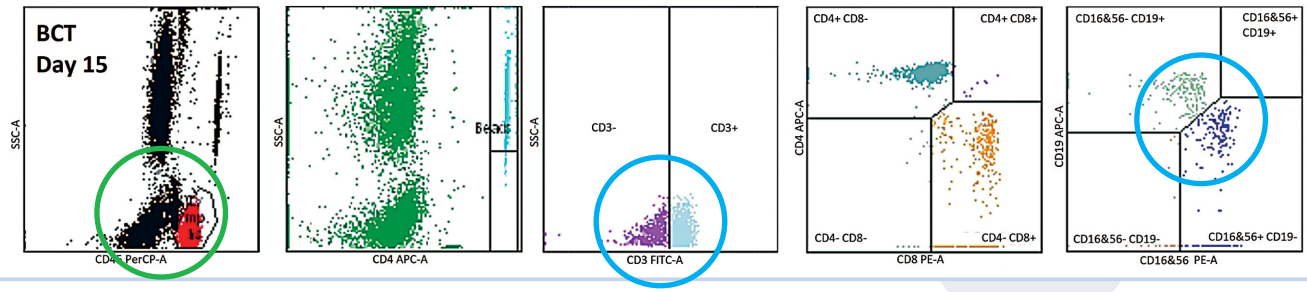
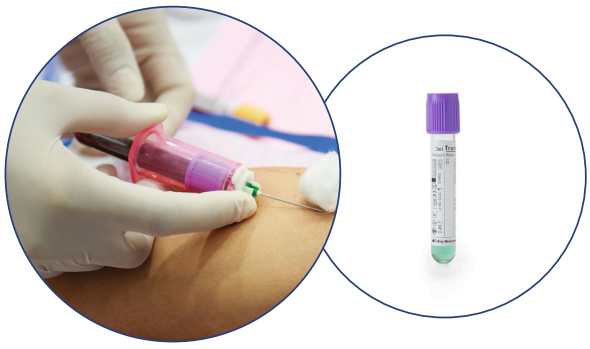


Figure 3: Blood Stabilised with Competitor Product (Day 15)





Benefits of the TransFix®/EDTA Vacuum Blood Collection Tube:

The green circles highlight lower cellular debris with the TVT indicative of more robust preservation of cells after 15 days.

The blue circles show the TVT provides clearer differentiation between leucocyte subpopulations (fig 2) compared to the competitor product (fig 3), allowing easier gating of samples after 15 days.

References

1. Dagur, P.K. and McCoy, Jr., J.P. (2015) Collection, Storage, and Preparation of Human Blood Cells. Curr. Protoc. Cytom. **73**:5.1.1-5.1.16

Product Formats

Product Code	Description
TVT-03-1	TransFix®/EDTA Vacuum Blood Collection Tubes (1 x 3 mL tube)
TVT-03-2	TransFix®/EDTA Vacuum Blood Collection Tubes (2 x 3 mL tubes)
TVT-03-50	TransFix®/EDTA Vacuum Blood Collection Tubes (50 x 3 mL tubes)
TVT-09-1	TransFix®/EDTA Vacuum Blood Collection Tubes (1 x 9 mL tube)
TVT-09-2	TransFix®/EDTA Vacuum Blood Collection Tubes (2 x 9 mL tubes)
TVT-09-50	TransFix®/EDTA Vacuum Blood Collection Tubes (50 x 9 mL tubes)

Contact your local distributor

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